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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,240	11/18/2003	Christopher J. Cookson	3053-063	6727

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EXAMINER	
CHOW, LIXI	

ART UNIT	PAPER NUMBER
2627	

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/716,240	COOKSON ET AL.	
	Examiner	Art Unit	
	Lixi Chow	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-21 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-21 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-21 are pending in this application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 4-7, 9-13 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winter (US 6,603,714) in view of Hatam-Tabrizi (US 6,256,267).

Regarding claims 1 and 6:

Winter discloses an optical disc player (Fig. 4) for playing an optical disc having a first side and a second side, wherein data is arranged on a data layer of said first side and data is arranged on a data layer of said second side (see col. 1, lines 50-55), said player comprising:

a laser head reading data from the optical disc (see Fig. 4, the scanning device);

a laser head controller controlling the movement of said laser head (see Fig. 4, it is inherent that the optical disc player includes a laser head controller for moving the scanning device from one side to the other);

a yoke selectively moving the laser head from one side of the optical disc to the other in response to commands from the laser head controller (see Fig. 4 and col. 2, lines 46-56).

a motor rotating the optical disc in the same direction independently of whether the laser head is on one side of the optical disc or the other (see col. 1, lines 52-59);

a data buffer buffering data received from the laser head (see col. 2, lines 25-27); and

wherein the optical disc has data arranged to be played in sequence starting on said first side and ending on said second side (see col. 2, lines 46-47 and col. 4, lines 45-47).

Winter fails to disclose the spiral orientation of the first side of the disc is opposite direction of the spiral orientation of the second side of the disc; and the laser head is move in accordance with the sequence in which data is placed on the optical disc. However, Hatam-Tabrizi discloses an optical disc player for playing an optical disc having a first side and a second side, wherein data is arranged on a data layer of said first side along a first spiral oriented in a first direction and data is arranged on a data layer of said second side along a second spiral oriented in a direction opposite to that of said first spiral when viewed on the respective sides (see col. 6, lines 21-22); and the laser head controller cooperates with the yoke to move the laser head in accordance with the sequence in which data is placed on the optical disc (see col. 6, lines 25-26) .

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the optical disc player of Winter, so that it employs an double-sided optical disc that has opposite spiral direction as taught by Hatam-Tabrizi. One of ordinary skill in the art would have been motivated to do this, because the information on the optical disc can be sequentially read out from inner portion of the disc to outer portion of the disc.

Regarding claim 2:

Winter discloses the disc player wherein the optical disc has a periphery and a hub, and said laser head controller controls said laser head to move between a point disposed closer to said periphery and another point closer to said hub (see Fig. 4).

Regarding claim 4:

Winter discloses the disc player wherein the disc includes a lead-in area, a lead-out area, and said laser head controller initially directs said laser head to said lead-in area (see Fig. 1 and col. 3, lines 12-14).

Regarding claim 5:

Winter discloses the disc player further comprising a sensor that senses the required rotation for reading the optical disc and a motor controller that controls the operation of said motor, said motor controller setting the direction of rotation of the motor in accordance with information from the sensor (see col. 3, lines 6-20; in order for the disc player to carry out reproduction of the disc from one side to the other, and to maintain the same rotational direction, it is inherent that the disc player includes a sensor and a motor controller).

Regarding claim 7:

Claim 7 recite similar limitations as claim 1; hence claim 1 is rejected under the same reasons set forth in claim 1.

Regarding claim 9:

Winter discloses the combination wherein data is arranged in a sequence starting on one layer of said first side and ending on another layer of said second side (see Fig. 4).

Regarding claims 10-13:

Winter discloses the combination wherein said sequence starts on the top/bottom layer of said first side and ends on the top/bottom layer of the second side (claim only specify two layers, i.e., a layer on first side and another layer on second side; the sequence starts from an arbitrary side, and Winter discloses the sequence starts from one side to the other; hence the claims are met).

Regarding claims 18-20:

Claims 18-20 recite similar limitations as claims 1, 2, 5 and 6; hence, claims 18-20 are rejected under the same reasons set forth in claims 1, 2, 5 and 6.

3. Claims 3 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winter and Hatam-Tabrizi as applied to claims 1 and 2, or 18 above, and further in view of Applicant's admitted prior art (AAPA).

Regarding claim 3:

Winter and Hatam-Tabrizi do not, but AAPA discloses an optical disc wherein at least one side has at least two data layers (see paragraph [0019]).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to employ an optical disc that has at least two data layers on each side in the optical disc player of the Winter and Hatam-Tabrizi. One of ordinary skill in the art would have been motivated to do so, because optical disc having two data layers on each side yields large recording capacity.

Regarding claim 21:

Claim 21 recites similar limitation as claim 3; hence, claim 21 is rejected under the same reason set forth above.

4. Claims 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winter and Hatam-Tabrizi as applied to claim 7 above, and further in view of Akiyama et al. (US Pub. No. 2004/0090897; hereafter Akiyama).

Regarding claim 8:

Winter and Hatam-Tabrizi do not, but Akiyama discloses an optical disc player, wherein the optical disc has a hub and a periphery, said tracks extend between said hub and said periphery and the laser head controller issues commands to cause said laser head to move along said tracks to read data starting at the periphery on one layer to said hub and then from said hub on the other layer of the same side back to said periphery (see paragraph [0025] and Fig. 7).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to adopt the different variations of the movement of the laser head in the disc player of Winter and Hatam-Tabrizi as suggested by Akiyama. One of ordinary skill in the art would have been motivated to do this, because recording/reproducing can be carry out seamlessly from one layer to the other (see paragraph [0070]).

5. Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winter and Hatam-Tabrizi as applied to claims 7 and 9 above, and further in view of Akiyama.

Regarding claims 14-17:

Winter and Hatam-Tabrizi do not, but Akiyama discloses an optical disc or a combination of optical disc player and an optical disc, wherein the first track of the sequence extends from the periphery of the disc toward the hub of the disc and the last track starts from the hub of the disc and extends towards the periphery of the disc; and/or wherein the sequence starts at the periphery of the disc and ends at the periphery of the disc; and/or the sequence starts at the hub of the disc and ends at the hub of the disc; and/or on each side the track of the inner layer has a radial direction between said hub of the disc and the periphery of the disc and the track on the outer layer has the opposite radial direction (see paragraph [0025]).

The reason to combine the teaching of Winter, Hatam-Tabrizi and Akiyama is the same as the reason provided in claim 8.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nakase et al. (US 5,563,855) discloses optical recording and reproducing apparatus capable of read/record from/to both sides of the optical disc.

Han (US 5,235,575), Shinada (US 5,970,029) and Kakuyama (US 5,257,111), each teaches an apparatus for successive reproducing in an optical disc, wherein the apparatus comprising a yoke to enable the optical head to move from one side of the disc to the other.

Kim (US 5,448,373) shows an optical disc player having upper side reproduction pickup and lower side reproduction pickup to playback a double-sided optical disc.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lixi Chow whose telephone number is 571-272-7571. The examiner can normally be reached on Mon-Fri, 8:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. L. Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LC 10/13/06

ANDREA WELLINGTON
SUPERVISORY PATENT EXAMINER